ENTERED   OIPE

RAW SEQUENCE LISTING   DATE: 08/06/2002
PATENT APPLICATION: US/09/902,481A   TIME: 17:10:06

Input Set : A:\A70586-1.ST25.txt
Output Set: N:\CRF3\08062002\I902481A.raw

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 3 <110> APPLICANT: Springer, Timothy
 4        Shimaoka, Motomu
 5        Shifman, Julia
 6        Mayo, Stephen
 8 <120> TITLE OF INVENTION: NOVEL PROTEINS WITH INTEGRIN-LIKE ACTIVITY
10 <130> FILE REFERENCE: A-70586-1/RFT/RMS/RMK
12 <140> CURRENT APPLICATION NUMBER: US 09/902,481A
13 <141> CURRENT FILING DATE: 2001-07-09
15 <150> PRIOR APPLICATION NUMBER: US 60/216,600
16 <151> PRIOR FILING DATE: 2000-07-07
18 <160> NUMBER OF SEQ ID NOS: 7
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39 1               5               10              15
42 Gly Phe Gly Gln Ser Val Val Gln Leu Gln Gly Ser Arg Val Val Val
43             20              25              30
46 Gly Ala Pro Gln Glu Ile Val Ala Ala Asn Gln Arg Gly Ser Leu Tyr
47         35              40              45
50 Gln Cys Asp Tyr Ser Thr Gly Ser Cys Glu Pro Ile Arg Leu Gln Val
51     50              55              60
54 Pro Val Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu Ala Ala Thr
55 65              70              75              80
58 Thr Ser Pro Pro Gln Leu Leu Ala Cys Gly Pro Thr Val His Gln Thr
59             85              90              95
62 Cys Ser Glu Asn Thr Tyr Val Lys Gly Leu Cys Phe Leu Phe Gly Ser
63             100             105             110
66 Asn Leu Arg Gln Gln Pro Gln Lys Phe Pro Glu Ala Leu Arg Gly Cys
67         115             120             125
70 Pro Gln Glu Asp Ser Asp Ile Ala Phe Leu Ile Asp Gly Ser Gly Ser
71     130             135             140
74 Ile Ile Pro His Asp Phe Arg Arg Met Lys Glu Phe Val Ser Thr Val
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 79             165             170             175
 82 Ser Glu Glu Phe Arg Ile His Phe Thr Phe Lys Glu Phe Gln Asn Asn
 83             180             185             190
 86 Pro Asn Pro Arg Ser Leu Val Lys Pro Ile Thr Gln Leu Leu Gly Arg
 87         195             200             205
 90 Thr His Thr Ala Thr Gly Ile Arg Lys Val Val Arg Glu Leu Phe Asn
 91     210             215             220
 94 Ile Thr Asn Gly Ala Arg Lys Asn Ala Phe Lys Ile Leu Val Val Ile
 95 225             230             235             240
 98 Thr Asp Gly Glu Lys Phe Gly Asp Pro Leu Gly Tyr Glu Asp Val Ile
 99             245             250             255
102 Pro Glu Ala Asp Arg Glu Gly Val Ile Arg Tyr Val Ile Gly Val Gly
103             260             265             270
106 Asp Ala Phe Arg Ser Glu Lys Ser Arg Gln Glu Leu Asn Thr Ile Ala
107         275             280             285
110 Ser Lys Pro Pro Arg Asp His Val Phe Gln Val Asn Asn Phe Glu Ala
111     290             295             300
114 Leu Lys Thr Ile Gln Asn Gln Leu Arg Glu Lys Ile Phe Ala Ile Glu
115 305             310             315             320
118 Gly Thr Gln Thr Gly Ser Ser Ser Ser Phe Glu His Glu Met Ser Gln
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122 Glu Gly Phe Ser Ala Ala Ile Thr Ser Asn Gly Pro Leu Leu Ser Thr
123         340             345             350
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127         355             360             365
130 Glu Lys Ser Thr Phe Ile Asn Met Thr Arg Val Asp Ser Asp Met Asn
131     370             375             380
134 Asp Ala Tyr Leu Gly Tyr Ala Ala Ala Ile Ile Leu Arg Asn Arg Val
135 385             390             395             400
138 Gln Ser Leu Val Leu Gly Ala Pro Arg Tyr Gln His Ile Gly Leu Val
139             405             410             415
142 Ala Met Phe Arg Gln Asn Thr Gly Met Trp Glu Ser Asn Ala Asn Val
143         420             425             430
146 Lys Gly Thr Gln Ile Gly Ala Tyr Phe Gly Ala Ser Leu Cys Ser Val
147         435             440             445
150 Asp Val Asp Ser Asn Gly Ser Thr Asp Leu Val Leu Ile Gly Ala Pro
151     450             455             460
154 His Tyr Tyr Glu Gln Thr Arg Gly Gly Gln Val Ser Val Cys Pro Leu
155 465             470             475             480
158 Pro Arg Gly Gln Arg Ala Arg Trp Gln Cys Asp Ala Val Leu Tyr Gly
159             485             490             495
162 Glu Gln Gly Gln Pro Trp Gly Arg Phe Gly Ala Ala Leu Thr Val Leu
163             500             505             510
166 Gly Asp Val Asn Gly Asp Lys Leu Thr Asp Val Ala Ile Gly Ala Pro
167         515             520             525
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171     530             535             540
174 Gly Ser Gly Ile Ser Pro Ser His Ser Gln Arg Ile Ala Gly Ser Lys
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178 Leu Ser Pro Arg Leu Gln Tyr Phe Gly Gln Ser Leu Ser Gly Gly Gln
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187           595               600               605
190 Met Glu Phe Asn Pro Arg Glu Val Ala Arg Asn Val Phe Glu Cys Asn
191       610               615               620
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198 His Val Gln Lys Ser Thr Arg Asp Arg Leu Arg Glu Gly Gln Ile Gln
199               645               650               655
202 Ser Val Val Thr Tyr Asp Leu Ala Leu Asp Ser Gly Arg Pro His Ser
203           660               665               670
206 Arg Ala Val Phe Asn Glu Thr Lys Asn Ser Thr Arg Arg Gln Thr Gln
207           675               680               685
210 Val Leu Gly Leu Thr Gln Thr Cys Glu Thr Leu Lys Leu Gln Leu Pro
211       690               695               700
214 Asn Cys Ile Glu Asp Pro Val Ser Pro Ile Val Leu Arg Leu Asn Phe
215 705               710               715               720
218 Ser Leu Val Gly Thr Pro Leu Ser Ala Phe Gly Asn Leu Arg Pro Val
219               725               730               735
222 Leu Ala Glu Asp Ala Gln Arg Leu Phe Thr Ala Leu Phe Pro Phe Glu
223           740               745               750
226 Lys Asn Cys Gly Asn Asp Asn Ile Cys Gln Asp Asp Leu Ser Ile Thr
227           755               760               765
230 Phe Ser Phe Met Ser Leu Asp Cys Leu Val Val Gly Gly Pro Arg Glu
231       770               775               780
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235 785               790               795               800
238 Thr Gln Val Thr Phe Phe Phe Pro Leu Asp Leu Ser Tyr Arg Lys Val
239               805               810               815
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243           820               825               830
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247           835               840               845
250 Cys Ser Ile Asn His Pro Ile Phe Pro Glu Asn Ser Glu Val Thr Phe
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258 Leu Leu Lys Ala Asn Val Thr Ser Glu Asn Asn Met Pro Arg Thr Asn
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266 Val Val Thr Ser His Gly Val Ser Thr Lys Tyr Leu Asn Phe Thr Ala
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278 Arg Leu Asn Gln Thr Val Ile Trp Asp Arg Pro Gln Val Thr Phe Ser
279             965             970             975
282 Glu Asn Leu Ser Ser Thr Cys His Thr Lys Glu Arg Leu Pro Ser His
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287         995             1000            1005
290 Ile Ala  Val Cys Gln Arg Ile  Gln Cys Asp Ile Pro  Phe Phe Gly
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299     1040            1045            1050
302 Thr Ala  Glu Ile Leu Phe Asn  Asp Ser Val Phe Thr  Leu Leu Pro
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306 Gly Gln  Gly Ala Phe Val Arg  Ser Gln Thr Glu Thr  Lys Val Glu
307     1070            1075            1080
310 Pro Phe  Glu Val Pro Asn Pro  Leu Pro Leu Ile Val  Gly Ser Ser
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315     1100            1105            1110
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<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 3,4,5,6

VERIFICATION SUMMARY   DATE: 08/06/2002
PATENT APPLICATION: US/09/902,481A   TIME: 17:10:07

Input Set : A:\A70586-1.ST25.txt
Output Set: N:\CRF3\08062002\I902481A.raw

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